

2. — *South African Megaloptera*. — By P. EBSSEN—PETERSEN.

By the kindness of Dr. L. Péringuey, South African Museum, I have been enabled to examine some material of Megaloptera from South Africa, and in the following pages I give the result of my investigations. Only little is known about the Megalopterous fauna of Africa, and only few species are known from that part of the world. In 1867 Mac Lachlan described *Chauliodes pusillus* (loc. inc.), in 1869 the same author described *Chauliodes tenuis* from Knysna district, and in 1920 I described *Leptosialis africana* from the Winterhoek Mountains.

At present the following species are known:

FAM. SIALIDAE.

SUB-FAM. CORYDALINAE.

TRIBE NEUROMINI.

CHLORONIELLA PÉRINGUEYI, n. g. & n. sp.

TRIBE CHAULIODINI.

TÆNIOCHAULIODES OCHRACEOPENNIS, n. g. & n. sp.

PLATYCHAULIODES PUSILLUS (Mac Lachlan).

LEPTOCHAULIODES TENUIS (Mac Lachlan).

SUB-FAM. SIALIDINI.

LEPTOSIALIS AFRICANA Esb.—Peters.

I have here followed Weele as to the systematical arrangement and with regard to the terminology of the anal appendages of the male.

CHLORONIELLA, n. g.

Head oblong, eyes prominent, sides of head behind the eyes with a triangular, tooth-shaped dilatation. Antennae as long as three fourths of the length of forewing, serrate (only the male sex is known).

Wings rather elongate and with rounded apices. Between *R* and *Rs* three crossveins. *Rs* with four branches. Most of the crossveins in the disc of forewings thickened in their middle part. Anal appendages of the male consist of a pair of upper appendages, of a pair of lower appendages and of a broad genital valve.

Genotype: *CHLORONIELLA PÉRINGUEYI*, n. sp.

As to the venation of the wings this genus is nearly allied to the American genus *Chloronia* Banks; but with regard to the form of



Fig. 1. *Chloroniella péringueyi* ♂.

anal appendages in the male the genus has more likeness to the East-Asiatic genus *Protohermes* Weele.

The small number of branches from *Rs* and the peculiar shape of the dilatation on the side of the head give the genus an outstanding position among the *Neuromini*.

CHLORONIELLA PÉRINGUEYI, n. sp.

Head pale brownish yellow. A blackish brown spot between the insertion of the antennae; ocelli blackish brown. On the vertex a somewhat impressed longitudinal median line. At each side of the vertex a longitudinal jet black streak. Antennae pale greyish brown becoming darker towards apex; basal joint brown, shining. Prothorax one and a half times longer than broad, pale yellowish brown, with a jet black longitudinal streak at each side near the lateral margin. Meso- and metathorax pale yellowish brown with a darker spot at

the base of each wing. Abdomen pale brown; underside of thorax and abdomen yellowish brown. Legs-yellowish brown. Anal appendages pale brown with short whitish hairs. Upper appendages, seen from above, obtuse conical, seen from below, cup-shaped; the lower appendages claw-shaped; the genital valve very broad with a prolongation at each angle and with a semicircular rounded hind margin, which is incised in its middle. Wings hyaline. Venation pale brown.

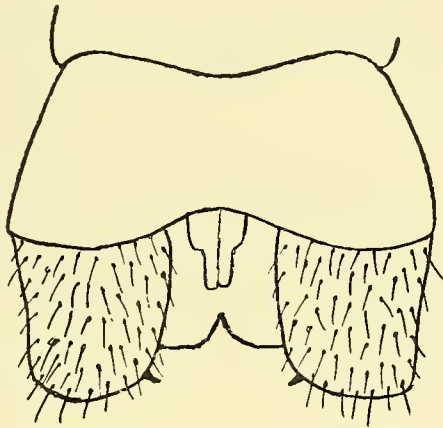


Fig. 2. *Chloroniella péringueyi*.
Dorsal view of anal appendages of ♂.

Some crossveins in the disc of the forewing either totally or partly black. At the origin of *Rs* in the forewing a blackish spot.

Forewing 33 mm.; hindwing 30 mm.

1 ♂ Stellenbosch, 9 XI 1920, Ch. K. Brain leg. Witte River, Wellington, Cape, XII, 1922, R. F. Lawrence. (South African Museum).

I have much pleasure in dedicating this very interesting species to Dr. L. Péringuey, who has done so much for our present knowledge of the South African insect fauna.

TÆNIOCHAULIODES, n. g.

Head elongate, narrowed behind; the ocelli placed rather close together. Antennae setaceous. Wings broadened towards apex, which is rather acute. Membrane of forewing with strongly yellowish brown tinge and rather indistinct greyish brown spots arranged somewhat in transverse bands. Costal area rather broad; most of costal crossveins curved in a peculiar manner. *Rs* with four branches. *M*₂ in the forewing forked. 2*A* forked, and its first branch coalesces with 1*A* for some distance. The upper appendages of male pale brown, short and stout, their tips strongly ob-

tuse, blackish and provided with short blackish hairs, curved downwards and inwards. The genital valve rather broad and with rounded angles.

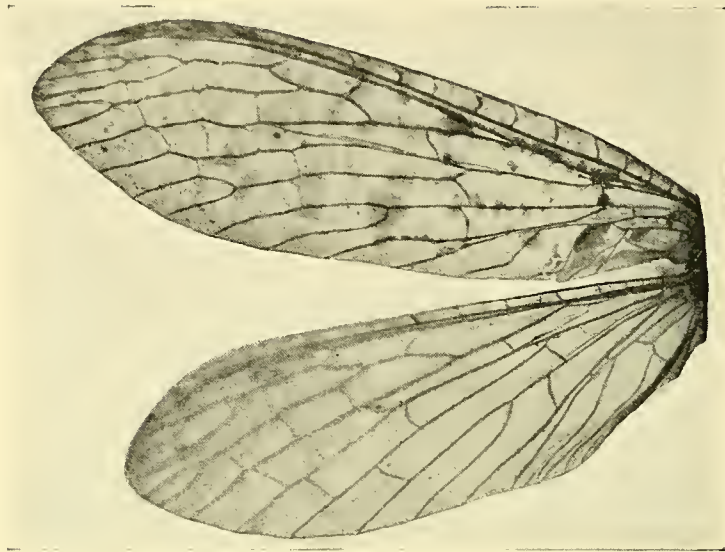


Fig. 3. *Tæniochauliodes ochraceopennis* ♂.

Genotype: *TÆNIOCHAULIODES OCHRACEOPENNIS*.

As to the shape of anal appendages of the male this genus seems to be nearest to the South American genus *Protochauliodes*. An interesting feature is the forking of M_2 in the forewing.

TÆNIOCHAULIODES OCHRACEOPENNIS, n. sp.

Head brown; the ocelli placed in a somewhat darker spot; the ocelli brownish, each of them surrounded by a circle of short

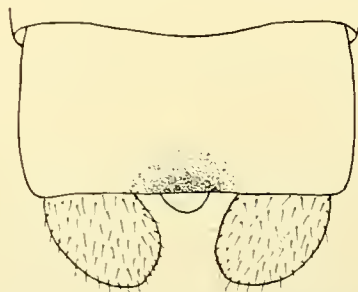


Fig. 4. *Tæniochauliodes ochraceopennis*.
Dorsal view of anal appendages of ♂. n. g. & n. sp.

whitish hairs. Hind part of head with a longitudinal impressed median line and with several somewhat elevated figures. Antennae

48-jointed, as long as three fourths of the length of forewing, brown, with short pubescence; second joint with narrow black ring at its apex. Prothorax brown, somewhat darker towards the sides, one and a half times as long as broad; the posterior half with a longitudinal impressed median line, the front half with a longitudinal median keel. Meso- and metathorax and abdomen brown with very short pubescence. Legs and underside of thorax and abdomen pale brown, tips of tibiae and of tarsal joints blackish. Membrane of forewings yellowish brown; venation yellowish brown with dark brown streaks, which are broadly shaded with brownish. Some of these shadows form rather distinct spots. Several of the crossveins in the apical part very pale. Costal area rather broad; 20-22 costal crossveins. Membrane of hindwings hyaline and with faint yellowish tinge. Venation pale brownish yellow. Costal area narrow and with 17-19 cross veins. In the forewing three chitinous dots are found in the area between *Rs* and *M*, in the hindwing two dots are found in the same area.

Forewing 23 mm.; hindwing 21 mm.; body 21 mm.

One male, Oudebosch, Caledon Division, Cape. Jan. 1919, K. H. Barnard leg. (South African Museum).

PLATYCHAULIODES, n. g.

Head elongate. Ocelli rather small and placed far apart from

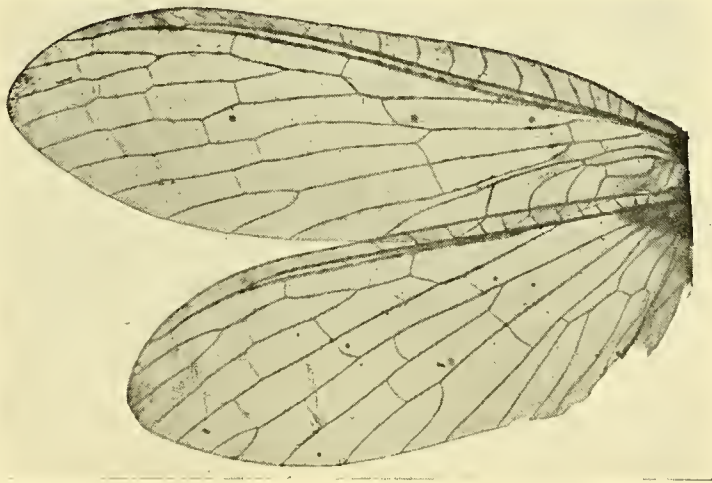


Fig. 5. *Platychauliodes pusillus* ♂.

each other. Antennae strongly serrate (only the male sex is known). Wings rather broad and with acute apex. Costal area in the

forewing rather broad. M_2 unforked. $2A$ in the forewing forked and connected with $1A$ by a crossvein. Upper appendages rather short; genital valve of a peculiar shape and with two strongly raised and curved ridges.

Genotype: *CHAULIODES PUSILLUS*, Mac Lachlan.

I have at hand a male specimen from Paarl Cape Div., Octbr. 1919, Rev. G. Hawke leg. (South African Museum) and a specimen without abdomen, but with serate antennae, from the same locality and collected at the same time and by the same collector (presented to me by Dr. L. Péringuey).

The hitherto only known specimen of *Chauliodes pusillus* Mac Lachlan (Journ. Linn. Soc. Lond., 231, 1867; Ann. and Mag. Nat. Hist., 39, 1869) is the type-specimen, which is kept in the collection of the late Mac Lachlan. The locality was unknown, and Mac Lachlan supposed it to be from India. Later on Weele (Collections Selys. Megaloptera, 48, 1910) regarded the species to be

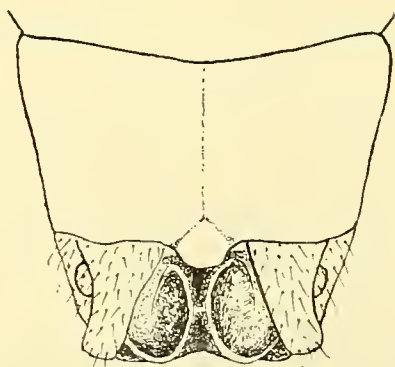


Fig. 6. *Platychauliodes pusillus*, Mac Lachlan.
Dorsal view of anal appendages of ♂.

from South Africa, and he also placed *Chauliodes tenuis* Mac Lachlan (Ann. and Mag. Nat. Hist., 38, 1869) from Knysna district as a synonym of it.

I have compared the two above named specimens with the description of Mac Lachlan and with a photograph of the type-specimen, reproduced in Collect. Selys. Megaloptera, pl. IV, fig. 36, and I am inclined to consider the supposition of Weele as to the locality of that species to be correct. The two specimens agree exactly with the description and with the figure. There are, however, some differences as to the anal appendages, and I may say, that I am not able to understand the description of them given by Mac Lachlan. The type-specimen has lost its antennae. Weele placed *Chauliodes*

pusillus in the genus *Archichauliodes*, which genus besides *pusillus* contains *dubitans* Walker from New Zealand and *guttiferus* Walker from Australia. Especially on account of the serrate antennae and the different form of the anal appendages of the male the species has to be placed in its own genus. Costal crossveins in the forewing 21—22; in the hindwing 19—20.

LEPTOCHAULIODES, n. g.

Head oblong. Ocelli rather large. Antennae setaceous (sex undeterminable). Wings slender and with narrow costal area. In the forewing 2 *A* is forked, and its first branch coalesces with 1 *A* for some distance.

Genotype: CHAULIODES TENUIS, Mac Lachlan.

Ann. and Mag. Nat. Hist., 38, 1869; Weele, Collect. Selys.
Megaloptera, 48, pl. III, fig. 28, 1910.

The type-specimen of this species is kept in the British Museum, and Mac Lachlan described it as a male. Weele, however, has seen

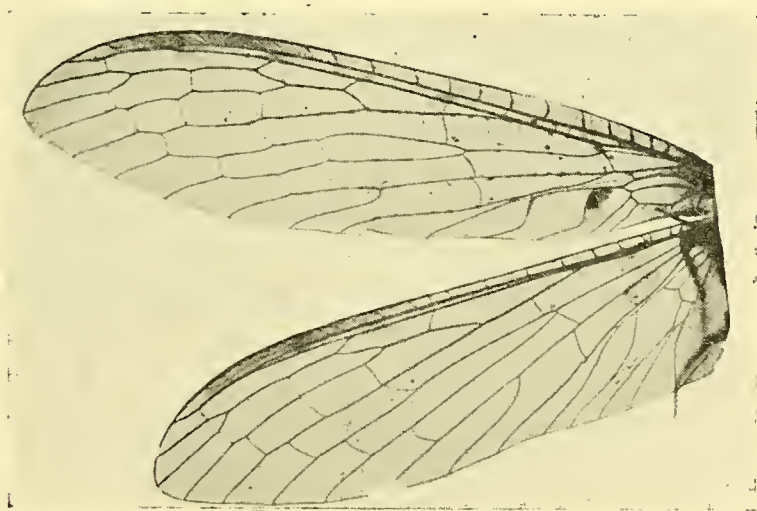


Fig. 7. *Leptochauliodes tenuis* ♂.

the type-specimen, and he considers it to be a female specimen. Amongst the material from South African Museum is a specimen of that species from Hottentot Hollands, Mts. 4000 ft. Caledon Div., Cape. Jan. 1916, K. H. Barnard leg. Its body is damaged by attack of insects, and therefore its sex is undeterminable.

The wings of the species are lanceolate and with rather acute apex. The membrane is hyaline, and the venation is brownish yellow with very short brown streaks, which are narrowly and faintly shaded with brownish. Near the base of the forewing a large brownish spot. The membrane of the wings is provided with numerous short dark bristles. Costal crossveins in the forewing 23—26; in the hindwing 22. With some hesitation Weele has placed the species in his genus *Archichauliodes*.
